IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MISSOURI CENTRAL DIVISION

REPRODUCTIVE HEALTH SERVICES OF PLANNED PARENTHOOD OF THE ST. LOUIS REGION, INC., et al.,)))
Plaintiffs,)
v.) Case No. 2:19-cv-4155
MICHAEL L. PARSON, in his official capacity as Governor of the State of Missouri, <i>et al.</i> ,))))
Defendant.)

RESPONSE OF DR. MAUREEN L. CONDIC, Ph.D. TO THE DECLARATION OF DECLARATION OF STEVEN J. RALSTON, M.D., M.P.H.

The numbers below refer to paragraphs in Dr. Ralston's testimony.

- 15. Dr. Ralston asserts that there is a "consensus in the medical community that, based on the most up-to-date evidence and research, it is not possible for a fetus to feel pain before at least 24 weeks LMP," citing only the 2010 review of the topic by RCOG and the 2005 JAMA review. The limitations of both of these reviews, including their lack of supporting evidence for the central claim that late-developing cortical circuitry is required for a fetus to experience pain, have been thoroughly addressed in my declaration. Moreover, reviews published in 2005 and 2010 hardly reflect the "most up-to-date evidence and research."
- 17. Dr. Ralston asserts that the spinal reflex (nociception) is not "evidence of pain," despite the fact that the very authority he cites, the International Association of Pain (IASP), defines "Nociceptive pain" as "Pain that arises from actual or threatened damage to non-neural tissue and is due to the activation of nociceptors," thus requiring the detection and response to noxious stimuli mediated by nociceptors to be an essential component of pain.
- 18. Dr. Ralston repeats here (and throughout his declaration), the assertion in RCOG and JAMA that "the consensus view among neuroscientists that the cortex, the highest region of the brain, is necessary for pain perception," citing three reviews of the subject. One review (Key, 2016) asserts fish do not experience pain. However, this assertion is actively contested in the

literature,¹ with one contrasting review indicating that "beneficial effects [of analgesics in fish] on behavior and physiologic parameters have been reported in many instances."² Moreover, the authoritative guidelines from the American Fisheries Society recommend the use of anesthesia and sedation for fish being used in research to prevent pain,³ a recommendation that is widely enforced by Institutional Animal Care and Use Committees.

Dr. Ralston cites two reviews of human pain, neither of which support his assertion. Apkarian et al., (2012) reviews pain processing in mature subjects but does not address pain perception in the fetus or define the brain structures that are "necessary for pain perception." Moreover, the review by Tracey and Mantyh (2007) directly contradicts the assertion of Dr. Ralston by observing (p. 378) "data from animals, healthy subjects, and patients increasingly confirm the central role that the brainstem plays in mediating changes in pain perception." Thus, like RCOG and JAMA, Dr. Ralston provides no evidence in support of his assertion that the cortex is required for pain perception.

- 19. Dr. Ralston correctly notes that cortical maturation continues well after birth (up until approximately age 25), a fact also noted in my declaration. However, the immaturity of the cortex does not prevent infants, children, teens and young adults from experiencing pain, a fact that strongly suggests pain occurs independent of mature cortical circuitry.
- 20. Dr. Ralston's supports his assertion "that the fetus never experiences true wakefulness in utero," by citations ranging from 1986-2010. However, this outdated view is contradicted by ample recent findings that indicate compounds present in the uterine environment are not sufficient to provide anesthesia to the fetus or to prevent it from awakening in response to painful stimuli.⁴
- 21. Dr. Ralston claims "Dr. Condic describes—that fetuses are "behaving" as though they are in pain during abortion procedures. Condic Decl. ¶ 44," but this is false. This paragraph of my declaration does not mention abortion, but rather deals with the consensus of anesthesiologists on use of medications to relieve pain in fetal surgery. Indeed, the behavior of a fetus during an abortion is not discussed at any point in my declaration.
- 24. Dr. Ralston asserts that my opinions are "not well supported," despite the presentation of ample, modern scientific information from peer-reviewed publications (well over 100 citations to the primary literature) in my declaration.
- 25. Dr. Ralston states, "Dr. Condic does not cite a single peer-reviewed publication in support of her claim that the medical community accepts her definition of pain," yet I make no claims regarding the views of the medical community. Individuals may hold opinions contradicting the

The Controversy on Fish Pain: A Veterinarian's Perspective. Chatigny F. J Appl Anim Welf Sci. 2019 Oct-Dec;22(4):400-410. doi: 10.1080/10888705.2018.1530596.

² Updated Review of Fish Analgesia. Chatigny F, Creighton CM, Stevens ED. J Am Assoc Lab Anim Sci. 2018 Jan 1;57(1):5-12.

³ https://fisheries.org/docs/wp/Guidelines-for-Use-of-Fishes.pdf

⁴ Bellieni, C. V., Vannuccini, S., & Petraglia, F. (2018). Is fetal analgesia necessary during prenatal surgery? The Journal of Maternal-Fetal & Neonatal Medicine, 31(9), 1241–1245. doi: 10.1080/14767058.2017.1311860

ample evidence I cite in my declaration for a number of reasons, including 1) they have not thought about the topic or critically examined the literature, 2) they have accepted the views of RCOG and JAMA without a critical examination, 3) they have a professional or monetary interest in concluding the fetus does not experience pain. Dr. Ralston has not presented any evidence contradicting the arguments and data I present, other than to repeat the unsupported assertions of RCOG and JAMA.

32. Dr. Ralston concludes, "although Dr. Condic puts forward various theories in her opinions, fetal pain is not possible before the third trimester of pregnancy," yet I have not put forward any theories, only cited published evidence that contradicts the unsupported assertions of RCOG and JAMA that are uncritically repeated by Dr. Ralston.

I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES OF AMERICA AND THE STATE OF UTAH THAT THE FOREGOING IS TRUE AND CORRECT.

Date: August 25, 2019 by:

Dr. Maureen L. Condic, Ph.D.

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